# MIDMARK®

# *Light Installation Guide (L/R)*

## CONTENTS


**Lower Light Arm Installation ..... 1**
**Upper Light Arm Installation ..... 2**
**Electrical Connection / Leveling Light Arm ..... 3**
**Installation Checklist..... 4**
**Specifications ..... 6**
**Transportation / Storgage Conditions ..... 6**
**Torque Specifications ..... 6**


## LOWER LIGHT ARM INSTALLATION

***(1)*** Raise seat section of chair.

***(2)*** Position spacer (1, Figure 1), thrust bearing (2), and two washers (3) over bolt (4).

***(3)*** Position two washers (5), thrust bearing (6), small spacer (7), and large spacer (8) over small hole in lower arm (9); then insert bolt (10).

***(4)*** Secure lower arm (9) by threading bolt (10) into hole in top of bolt (4).

***(5)*** Install bolt cover (11).

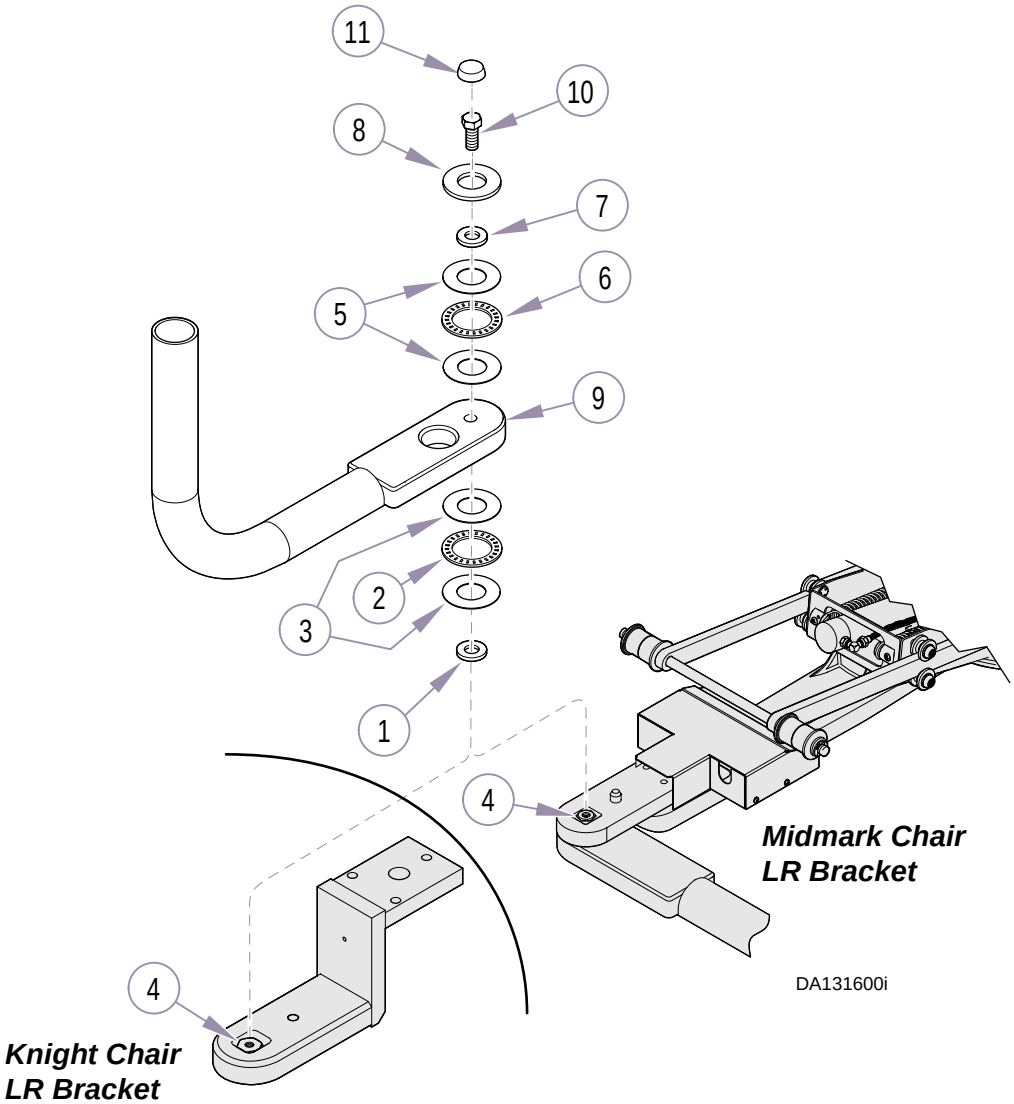


**Figure 1. Lower Monitor Arm Installation**

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003-1150-00 Rev. L (3/03)

## UPPER LIGHT ARM INSTALLATION

***(1)*** Position tab of rotation stop ring (1, Figure 2) in line with flex arm so that it is facing lighthead as shown; then insert flex arm shaft (2) into curved arm assembly (3) and secure with set screw (4).

***(2)*** Install nylon washer (5) onto light arm post (6).

***(3)*** Connect red wire from wire harness (7) ***[from upper light arm]*** to red wire from wire harness (8) ***[shipped loose]***, and black wire from wire harness (7) to black wire from wire harness (8).

**EQUIPMENT ALERT**

Use an assistant to secure lightarm at pivot points when performing the following step. Failure to do so could result in damage to lighthead.

***(4)*** Feed wire harness (8) down thru lower arm (9) and insert light arm post (6) into lower arm.

***(5)*** Pull wire harness (8) thru hole in end of lower arm (9).

***(6)*** Lift cover ring (10) and install stop pin (11) into hole in curved arm assembly (3).

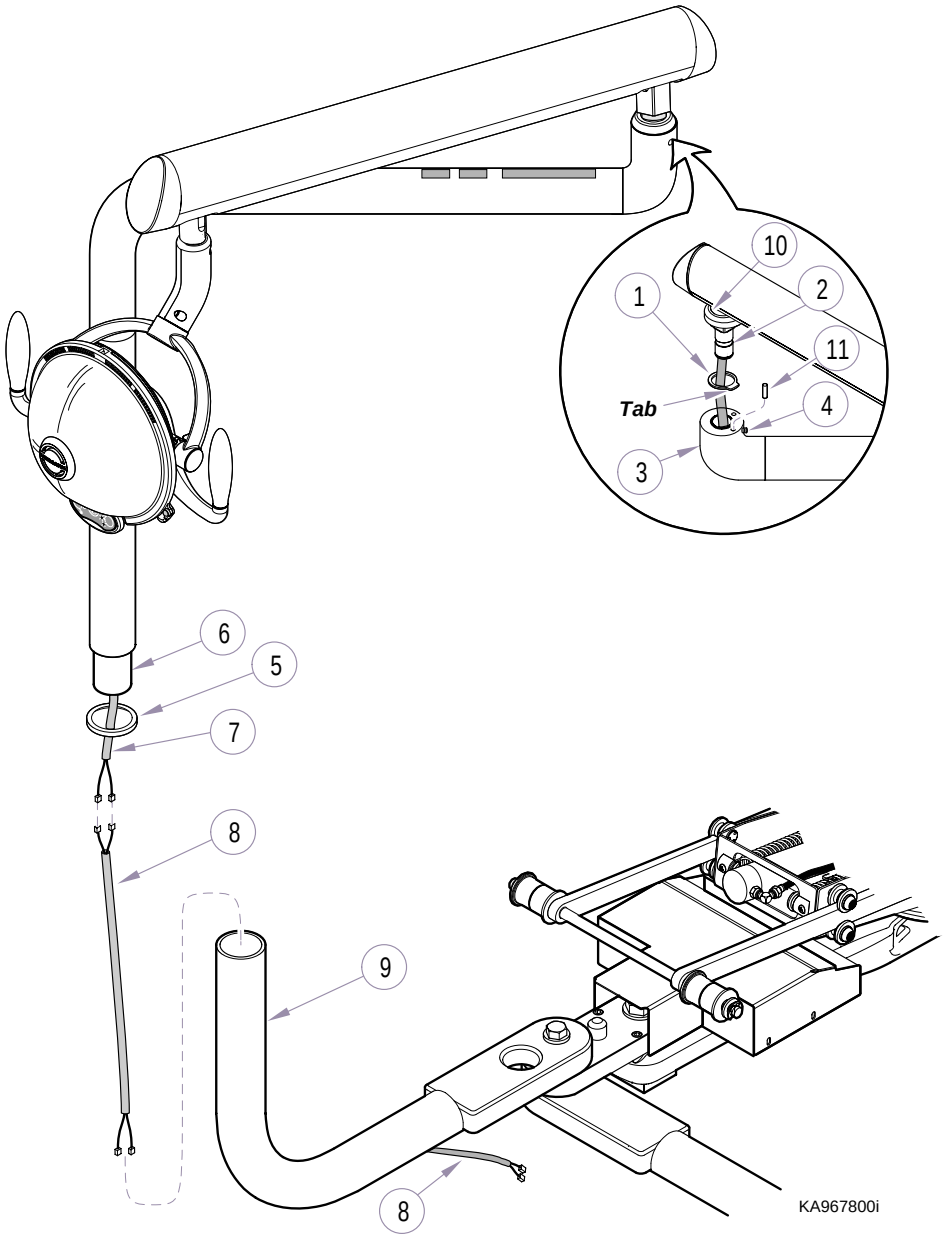


**Figure 2. Upper Light Arm Installation *(shown w/ Midmark chair)***

## ELECTRICAL CONNECTION / LEVELING LIGHT ARM

***(1)*** Lift seat section of chair.

***(2)*** Remove four screws (1, Figure 3) and connection box cover (2).

**NOTE**
When performing the following step on a Knight chair, route wire harness (3) thru retainer clip (not shown).

***(3)*** Route wire harness (3) ***[from light]*** up thru hole in light arm (4).

***(4)*** Position wire harness (3) in notch (5) of connection box.

***(5)*** Connect black wire (A) from wiring harness (3) to black wire (B) ***[from umbilical]***.

***(6)*** Connect red wire (C) from wiring harness (3) to red wire (D) ***[from umbilical]***.

***(7)*** Position light arm (4) straight out as shown; then adjust three leveling screws (6) until light arm is level.

***(8)*** Install connection box cover (2) and secure with four screws (1).

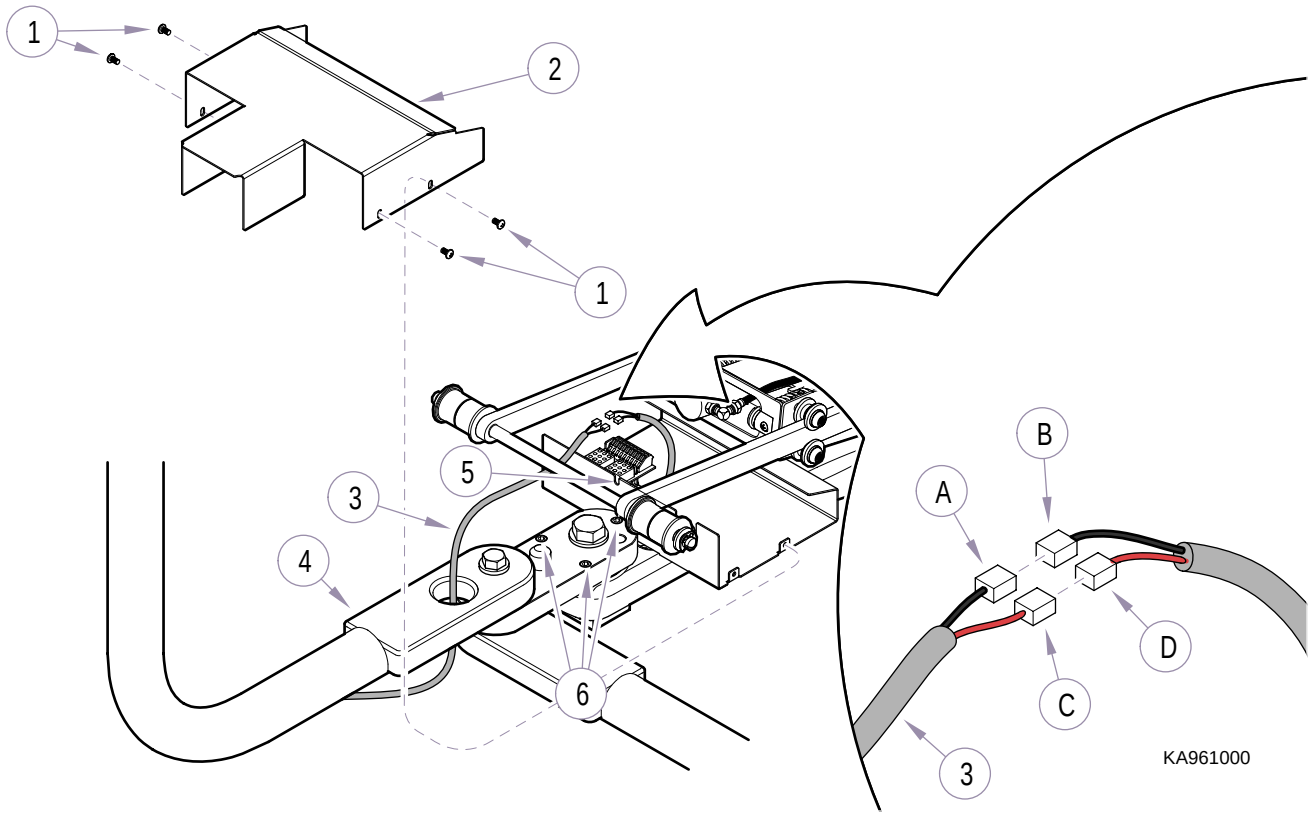


**Figure 3. Electrical Connection *(shown w/ Midmark chair)***

## INSTALLATION CHECKLIST

**EQUIPMENT ALERT**
Answering “NO” to any of the following questions indicates improper installation or a product malfunction. Check all connections, then refer to the Midmark Dental Light Service & Parts manual for corrective action if necessary.

| Yes | No | With Master Switch ON (and light OFF)... |
|---|---|---|
| ☐ | ☐ | *When **Power Button** is pressed once, does light illuminate?* |
| ☐ | ☐ | *When **Power Button** is pressed twice, does **Auto-On Indicator Light** illuminate?* |
| ☐ | ☐ | *With **Auto-On** function selected, does light illuminate when light arm is moved below horizontal **[see Figure 4]**? (Refer to User’s Guide for adjustment).* |
| ☐ | ☐ | *When **Power Button** is pressed three times, does light shut off?* |
| ☐ | ☐ | *When **Composite Button** is depressed, does light become noticeably dimmer?* |
| ☐ | ☐ | *Does **Intensity Button** adjust light beam to three settings (High, Medium, Low)?* |

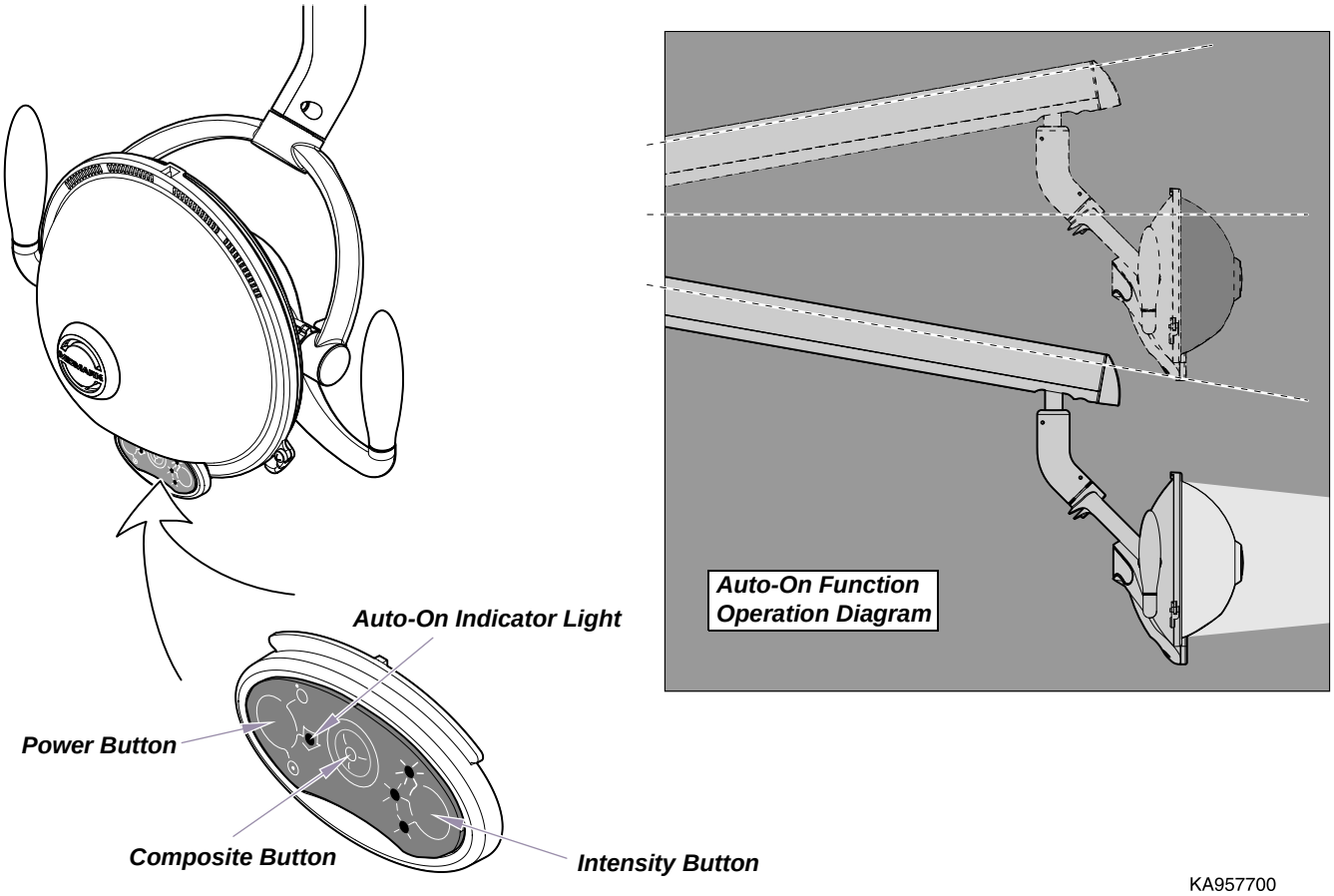


**Figure 4. Light Operation**

## INSTALLATION CHECKLIST - *continued*

**EQUIPMENT ALERT**
Answering "NO" to any of the following questions indicates an adjustment is necessary. Refer to the adjustment procedures in Figure 5.

| Yes | No | |
|---|---|---|
| ☐ | ☐ | *Does light move easily at all pivot points?* |
| ☐ | ☐ | *Does **Flex Arm** stay in position without "drifting"?* |
| ☐ | ☐ | *Does lighthead stay in position (at all pivot points) without "drifting"?* |

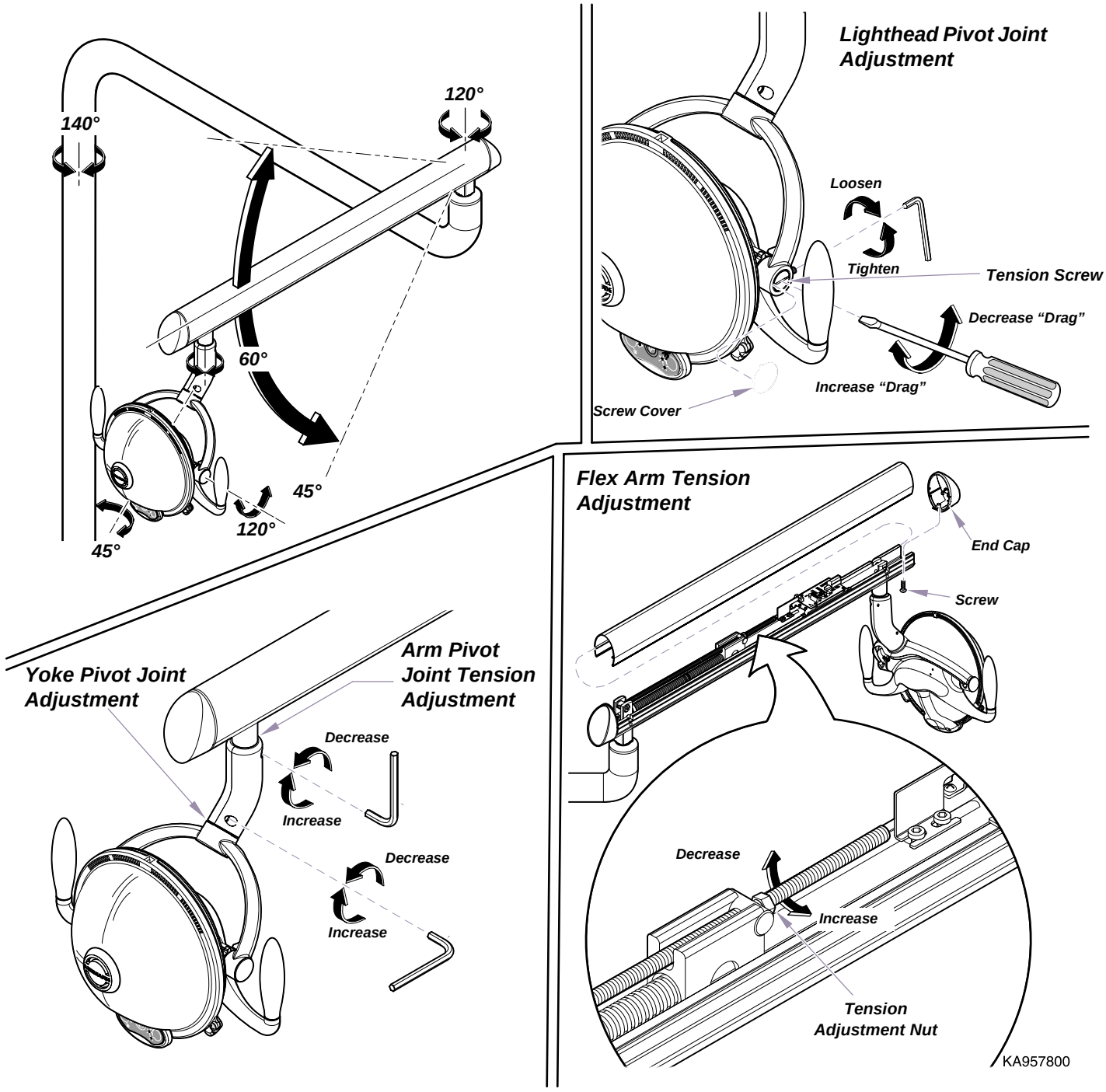


**Figure 5. Lighthead / Flex Arm Adjustment Procedures**

## SPECIFICATIONS

**Specifications**

| Description | Data |
|---|---|
| **Electrical Requirements:** | 18.5 VAC ±10%, 50/60 Hz 6 amp, single phase |
| **Bulb:** | 24 VAC, 150 W Tungston Halogen |
| **Power to Bulb @ Maximum Intensity:** | 15.7 VAC, 5.5 amps |
| **Classifications:** | Class 1, Type B, Applied Part, Ordinary Equipment |
| **Certifications:** | |
| Midmark Corporation | ISO-9001 Certified |
| 115 VAC Model | UL2601-1 CAN/CSA 22.2, #601.1-M90 |
| 230 VAC Model | Complies to the applicable revision of the MDD 93/42/EEC, Annex VII Complies to the applicable requirements of EN60601-1, EN60601-1-2, EN60601-1-4 |

## TRANSPORTATION / STORAGE CONDITIONS

- Ambient Temperature Range: .... -22°F to 140°F (-30°C to 60°C )
- Relative Humidity ..... 10% to 90% (non-condensing)
- Atmospheric Pressure..... 500hPa to 1060 hPa (0.49atm to 1.05atm)

## TORQUE SPECIFICATIONS

Torque specifications apply to hardware used on components unless otherwise noted in these installation instructions:

**Torque Specifications**

| Hardware Size | Torque Values |
|---|---|
| #6 | 11 to 21 inch / lbs. (1.2 to 2.3 N•m) |
| #8 | 20 to 30 inch / lbs. (2.2 to 3.3 N•m) |
| #10 | 32 to 42 inch / lbs. (3.6 to 4.8 N•m) |
| 1/4 inch | 75 to 85 inch / lbs. (8.5 to 9.6 N•m) |
| 5/16 inch | 18 to 22 ft. / lbs. (24.4 to 29.8 N•m) |
| 3/8 inch | 31 to 35 ft. / lbs. (42.0 to 47.5 N•m) |
| 1/2 inch | 50 to 60 ft. / lbs. (67.8 to 81.4 N•m) |

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